

Better Buildings Residential Network Peer Exchange Call Series

Environmental Justice & Residential Energy Efficiency

June 10, 2021



Agenda and Ground Rules

- Agenda Review and Ground Rules
- Opening Poll
- Residential Network Overview and Upcoming Call Schedule
- Featured Speakers
 - Cecilia Martinez, White House Council on Environmental Quality
 - Jamal Lewis, Green and Healthy Homes Initiative
 - Jacqui Patterson, NAACP
- Open Discussion
- Closing Poll and Announcements

Ground Rules:

- 1. Sales of services and commercial messages are not appropriate during Peer Exchange Calls.
- 2. Calls are a safe place for discussion; please do not attribute information to individuals on the call.

The views expressed by speakers are their own, and do not reflect those of the Dept. of Energy.





Better Buildings Residential Network

Join the Network

Member Benefits:

- Recognition in media and publications
- Speaking opportunities
- Updates on latest trends
- Voluntary member initiatives
- One-on-One brainstorming conversations

Commitment:

 Members only need to provide one number: their organization's number of residential energy upgrades per year, or equivalent.

Upcoming Calls (2nd & 4th Thursdays):

- 6/24: Residential Energy Efficiency and Jobs: The State of the COVID Recovery
- 7/08: In Hot Water? Residential Efficiency, Affordability & Technology
- 7/22: Like a Heat Wave: Summer Healthy, Efficient Housing Challenges

Peer Exchange Call summaries are posted on the Better Buildings website a few weeks after the call

For more information or to join, for no cost, email bbresidentialnetwork@ee.doe.gov, or go to energy.gov/eere/bbrn & click Join







Cecilia Martinez

White House Council on Environmental Quality



EJ Whole of Government Approach

Establish White House whole of government EJ FACA – The White House Environmental Justice Advisory Council

Establish White House EJ Interagency Council

Previously convened by EPA

Justice 40 Investments. 40% of overall investment benefits flow to disadvantaged communities in

- Clean energy and energy efficiency
- Clean transit
- Affordable and sustainable housing
- Training and workforce development
- Remediation and reduction of legacy pollution
- Critical clean water infrastructure

Climate and Economic Justice Screening Tool

Publish interactive maps highlighting disadvantaged communities



Environmental Justice: A Review of the Whole of Government Agenda

Cecilia Martinez, PhD Senior Director for Environmental Jutice Council on Environmental Quality



Executive Order Justice 40

Publish recommendations on how certain Federal investments might be made toward a goal that 40 percent oPf the overall benefits flow to disadvantaged communities (CEQ, OMB, National Climate Advisor, in consultation with WH EJ IAC)

- Clean energy and energy efficiency
- Clean transit
- Affordable and sustainable housing
- Training and workforce development
- Remediation and reduction of legacy pollution
- Critical clean water infrastructure
- Agencies shall identify applicable program investment funds and consider interim investment guidance to relevant program staff.



Justice40

Key Decision points

- Definition of "disadvantaged community
- Definition of benefit Identification of current programs (OMB taking lead)
 - Identification of current programs; current programs that can be directed; potential new programs
 - Interagency leveraging of resources
 - Public/private partnerships
 - Capacity building and outreach support

Agency specific and inter-agency programs

• EPA, DOE, DOT, DOL, HHS, HUD, NIEHS, FEMA, etc.)



Justice 40 Investments:

Collect and summarize data about covered programs

Consultation and briefing with agencies and other IWGs (Energy Communities and Health Equity) on Justice40 actions/recommedations

Benefit definition

Consultation with EJ IAC, WHEJAC and other stakeholders

Development of "disadvantaged" definition

Consultation with stakeholders

Recommendations on Justice 40 program investments from CEQ, OMB, National Climate Advisor



Screening Tool (CEJST)

Identify users or set of users/stakeholders

EJ community and general public

Government decision-makers (local, state, tribal as well as federal)

Stakeholder/user engagement

Objectives and Purposes include:

Public information tool

Identification/reconciliation of Justice40 communities

Agency performance scorecard

Screening Conceptual Framework

Cumulative indices/areas of concern/threshold analyses

Agency performance metrics

Indicator development

Data

National data sets

Agency-relevant data



American Jobs Plan

Build, Preserve, and Retrofit More Than Two Million Homes and Commercial Buildings, Modernize Our Nation's Schools and Child Care Facilities, and Upgrade Veterans' Hospitals and Federal Buildings.

Building, rehabilitating, and retrofitting affordable, accessible, energy efficient, and resilient housing, commercial buildings, schools, community colleges, and child care facilities, as well as federal facilities

Invests in Tackling the Climate Crisis. Major new climate change investments—an increase of more than \$14 billion compared to 2021—across nearly every agency to: restore the critical capacity needed to carry out their core functions and to take a whole-of-government approach to tackling climate change; secure environmental justice for communities that have been left behind through the largest direct investment in environmental justice in history; and help developing countries reduce emissions and adapt to climate change





Jamal Lewis
Green & Healthy Homes Initiative



Environmental Justice and Residential Energy Efficiency U.S. Department of Energy Better Buildings Residential Network

June 10, 2020

Jamal Lewis
Director of Climate, Energy, and Health
Green & Healthy Homes Initaitive
jlewis@ghhi.org



About GHHI

Vision: Advancing racial and health equity and opportunity through healthy housing.

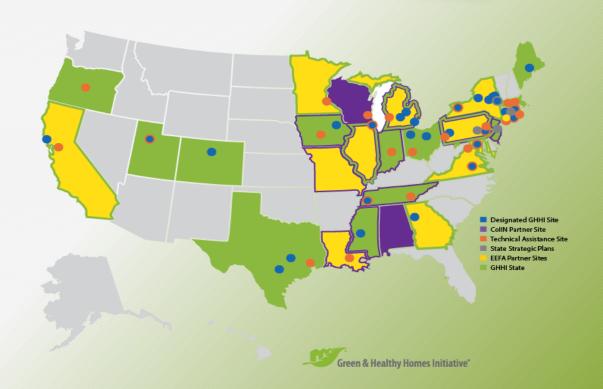
Mission: The Green & Healthy Homes Initiative is dedicated to addressing the social determinants of health and the advancement of racial and health equity through the creation of healthy, safe and energy efficient homes. By delivering a standard of excellence in its work, GHHI aims to eradicate the negative health impacts of unhealthy housing and unjust policies for children, seniors and families to ensure better health economic and social outcomes in low-income communities of color.

Operating Value: Ensuring racial equity in all policies, practices and actions



About GHHI - Where we work

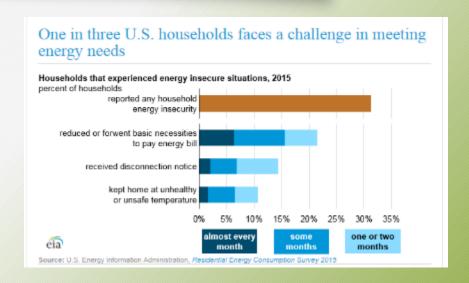
 In addition to GHHI sites, GHHI operates and manages a variety of state and local projects across the United States.





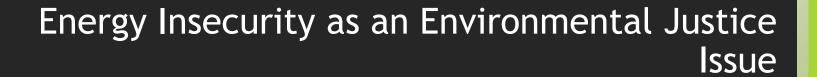
Energy Insecurity: Defining Energy Hardship

- El is characterized by an "inability of households to meet basic household energy needs" (Hernández, 2016)
 - Economic: Unaffordable energy bills; arrearages, financial spiral
 - Physical: Inferior housing and energy-related conditions
 - Behavioral: Trade-offs, vigilant energy consumption, alternative heating strategies, foregoing comfort
- National Estimate: 37 million Americans are energy insecure (1 in 3 households)
 - Primarily affects low-income households, African Americans and households with children
- Impacts
 - Thermal discomfort and poor indoor air quality
 - Trade-offs due to financial strain-foregoing other necessities
 - Crisis- disconnection notices and shutoffs
 - Psychological effects



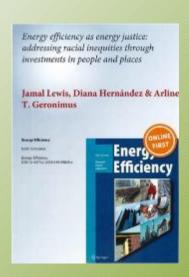
The Lived Experience of Energy Insecurity

- "It's kinda hard because you can never level out [the temperature]. With the temperature being so cold, I even had to go and buy a heater because I cannot cut my heat up on 80, otherwise, I'm looking at a six, or \$700 light bill. At 68 degrees the house is not warm enough for us. That's even with us putting on extra blankets on the bed... The apartment may not be insulated right, but I've talked to the landlord about that. He has put insulation but its still cold in here. It's just certain rooms are hot and others are cold you just can't get it leveled." --African American Memphis resident, interviewed in 2018
- "That furnace was in there since the house was built. It's one of those old-fashioned furnaces that looks like an octopus with all the ducts everywhere. It needed to be replaced and I called the heating/cooling person. He had gotten it to run before but then he said, there wasn't nothin' that he could do for it this time. He said I should find me another house to live or buy another furnace, which would probably cost \$10,000. That's when I started using my stove to have a little heat." -- African American Detroit resident, interviewed in 2018



Racial Inequities related to Energy Outcomes

- African Americans are disproportionately impacted by:
 - Housing Burden
 - Energy Burden
 - Health Vulnerabilities
 - Bundled Burdens/Economic Trade-Offs
 - Extreme Weather/Climate Impacts
 - Energy Transitions
 - · Depletion of the Resilience Reserve
- These inequities are caused in part by
 - Racist and discriminatory housing policies
 - Residential segregation (Geronimus 2000; Massey and Denton 2003; Oliver and Shapiro 2006)
 - Historical disinvestment
 - Denied access to loans and other resources to improve housing conditions (Aalbers 2006; Blumgart 2017; Woods 2012)



Energy Efficiency as Energy Justice

Energy Justice Framework

- Recognition Justice the acknowledgement of, and respect for, the complex circumstances and vulnerabilities of individuals and social groups in patterns of cultural value
- Procedural Justice fairness in decision-making processes
- Distributional Justice fair and equitable distribution of benefits and burdens
- Restorative Justice intentional action to redress past wrongs

Promoting Equity with Energy Efficiency

- Recognition: Acknowledge the need for energy efficiency is caused in part by the legacy of discriminatory housing policies and historical disinvestment
- Procedural: Ensure that impacted community members can drive and inform energy efficiency and weatherization policies and programs
- Distributional: Track and measure program outcomes to ensure equity
- Restorative: Design programs to improve housing conditions while improving energy efficiency

GHHI's Whole-House Strategy

Based on a combination of education, assessment, and home modifications to address:

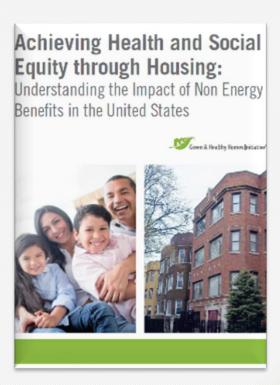
Hazards Recognition, Hazards Risk Assessment, Risk Management Strategies

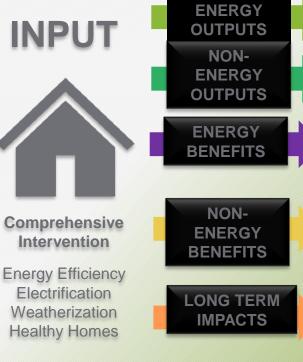
- Lead-based paint hazards
- Asthma triggers (Mold, pests, VOCs, etc.)
- Injury hazards (Falls, fire, poisoning, etc.)
- Radon and asbestos hazards
- Energy efficiency/weatherization issues

Conducted by cross-trained assessors, educators, and crews addressing housing issues holistically



Role of Energy Efficiency in Promoting Equity

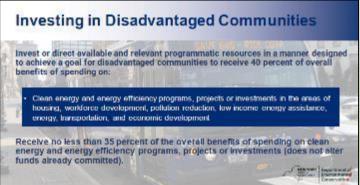




- reduced kWh consumed
- reduced energy demand
- improved air quality
- increased thermal comfort
- reduced toxins
- improved service reliability
- reduced system maintenance needs
- environmental quality
- · occupant health
- family economic security
- neighborhood quality improvement
- reduced health disparities
- · school attendance
- economic productivity

Examples of Promoting Energy Justice

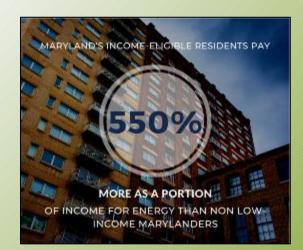




Sierra Club and DTE Reach Agreement for Groundbreaking Energy Efficiency Pilot Program to Minimize Utility Shut-offs

Program to Pay for New Energy Efficient Appliances Including Water Heaters

Thursday, March 5, 2020





Measuring Equity in Energy Efficiency Programs

Six Dimensions of Equity

Historical legacies

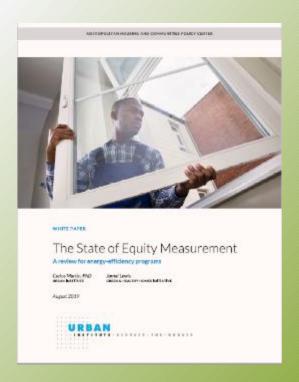
Awareness of populations

Inclusion of other voices

Access discrimination

Output differences

Disparate impacts





Questions & Comments



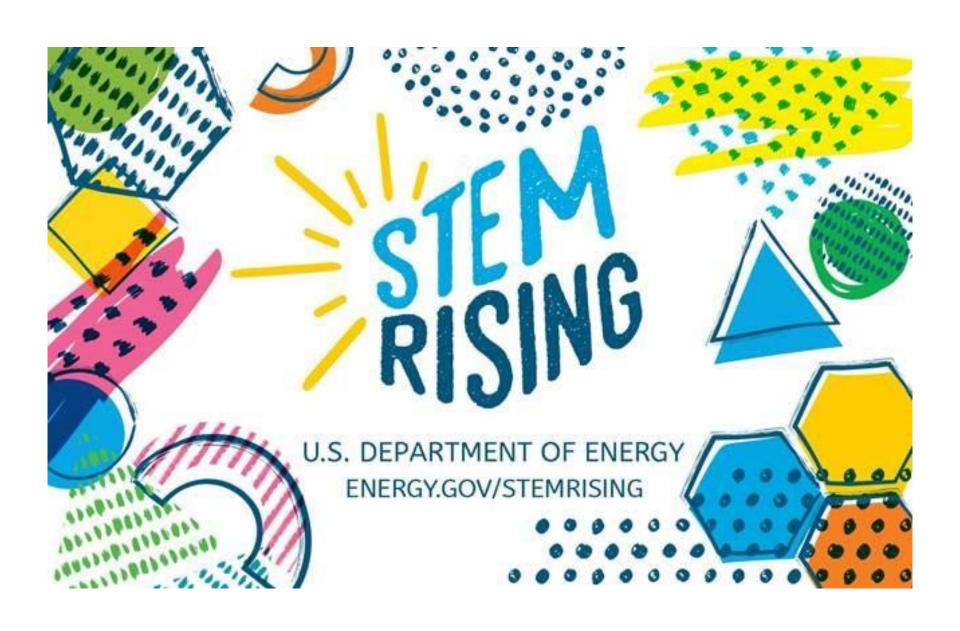






Jacqui Patterson *NAACP*

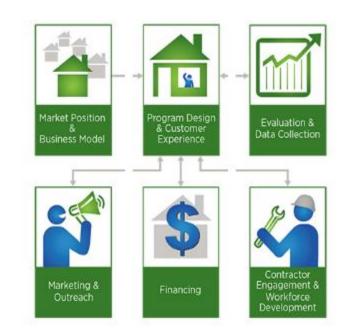




Explore the Residential Program Solution Center

Resources to help improve your program and reach energy efficiency targets:

- Handbooks explain why and how to implement specific stages of a program.
- Quick Answers provide answers and resources for common questions.
- Proven Practices posts include lessons learned, examples, and helpful tips from successful programs.
- Technology Solutions NEW! present resources on advanced technologies, HVAC & Heat Pump Water Heaters, including installation guidance, marketing strategies, & potential savings.



https://rpsc.energy.gov





Thank You!

Follow us to plug into the latest Better Buildings news and updates!



Better Buildings Twitter with #BBResNet



Better Buildings LinkedIn



Office of Energy Efficiency and Renewable Energy Facebook

Please send any follow-up questions or future call topic ideas to:

bbresidentialnetwork@ee.doe.gov



